

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A process for producing a cold-rolled ferritic/martensitic dual-phase steel strip, wherein a slab, the chemical composition of which comprises, by weight:

0.020% ≤ C ≤ 0.060%

0.300% ≤ Mn ≤ 0.500%

0.010% ≤ Cr ≤ 1.0%

0.010% ≤ Si ≤ 0.50%

0.010% ≤ P ≤ 0.100%

0.010% ≤ Al ≤ 0.10%

N ≤ 0.010%

the balance being iron and impurities resulting from the smelting, is hot rolled, said process then comprising:

- coiling the hot-rolled strip obtained at a temperature of between 550 and 850°C; then

- cold rolling the strip with a reduction ratio of between 60 and 90%; then
- annealing the strip continuously in the intercritical range; and
- cooling it down to the ambient temperature in one or more steps, the cooling rate between 600°C and the ambient temperature being between 100°C/s and 1500°C/s; and
- optionally tempering it at a temperature less than 250°C,

the annealing and cooling operations being carried out in such a way that the strip

finally contains from 1 to 15% martensite, and

wherein the cold-rolled ferritic/martensitic dual-phase steel strip has a tensile strength Rm of greater than 600 MPa.

2. (canceled).

3. (previously presented): The process as claimed in claim 1, wherein the strip is hot rolled at a temperature above 850°C.

4. (previously presented): The process as claimed in claim 1, wherein the strip is hot rolled at a temperature of between 550 and 750°C.

5. (previously presented): The process as claimed in claim 1, wherein the strip is cold rolled with a reduction ratio of between 70 and 80%.

6. (previously presented): The process as claimed in claim 1, wherein the continuous annealing of the cold-rolled strip comprises a temperature rise phase followed by a soak phase at a predetermined temperature.

7. (original): The process as claimed in claim 6, wherein the soak temperature is between Ac₁ and 900°C.

8. (original): The process as claimed in claim 7, wherein the soak temperature is between 750 and 850°C.

9. (previously presented): The process as claimed in claim 1, wherein the cooling down to the ambient temperature comprises a first, slow cooling step between the soak temperature and 600°C, during which the cooling rate is less than 50°C/s, followed by a second cooling step at a higher rate, of between 100°C/s and 1500°C/s, down to the ambient temperature.

10. (original): The process as claimed in claim 9, wherein the second cooling step is carried out by water quenching.

11. (previously presented): The process as claimed in claim 1, wherein the cooling is

carried out in a single operation at a cooling rate of between 100°C/s and 1500°C/s.

12. (original): The process as claimed in claim 11, wherein the cooling is carried out by water quenching.